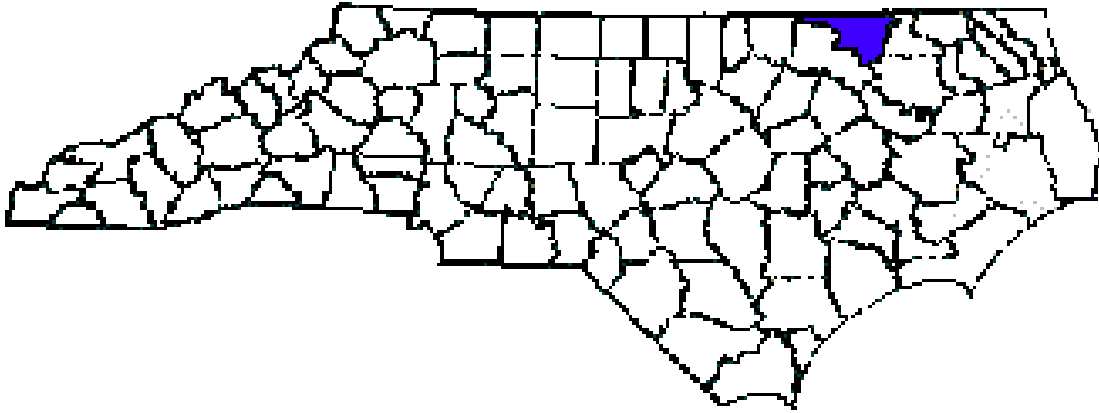


ANNUAL REPORT FOR 2009



**Roanoke River Overflow Mitigation Site
Northampton County
TIP No. B-1303**



Prepared By:
Natural Environment Unit & Roadside Environmental Unit
North Carolina Department of Transportation
July 2009

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SUMMARY

The Roanoke River Overflow Mitigation Site is located in Northampton County. The site was planted in March 2008 and was designed as wetland mitigation for impacts associated with bridge project B-1303.

The mitigation encompasses approximately 0.75 acres total of wetland restoration. NCDOT will restore 0.53 acres of proposed temporary fill and 0.14 acres of mechanized land clearing needed for the onsite detour and will restore another 0.08 acres of riverine swamp wetland by removing causeway fill underneath the existing bridge. The restoration effort involved re-vegetating the area that was temporarily impacted. The area that was impacted is being monitored to ensure that it re-attains wetland jurisdictional status. The restoration area was re-vegetated with bottomland hardwood species. No hydrologic monitoring is required for this project; however, vegetation monitoring is required for three years.

There was one vegetation monitoring plot established throughout the 0.75 acre site. After two years of monitoring, the 2009 vegetation monitoring of the site revealed an average tree density of 633 trees per acre. This average is well above the minimum success criteria of 320 trees per acre.

NCDOT recommends continuing vegetation monitoring of this site.

1.0 INTRODUCTION

1.1 Project Description

The Roanoke River Overflow Mitigation Site is located at Bridge No. 76 over Roanoke River Overflow on US 258 (Figure 1). The site consists of approximately 0.75 acres of mitigation for wetland impacts associated with project B-1303.

1.2 Purpose

In order for a mitigation site to be considered successful, the site must meet vegetation success criteria. This report details the vegetation monitoring in 2009 at the Roanoke River Overflow Mitigation Site. Hydrologic monitoring was not required for the site.

1.3 Project History

March 2008	Site planted
August 2008	Vegetation Monitoring (1 year)
July 2009	Vegetation Monitoring (2 year)

2.0 VEGETATION: ROANOKE RIVER OVERFLOW MITIGATION SITE (YEAR 2 MONITORING)

2.1 Success Criteria

NCDOT will be responsible for monitoring the area for a period of 3 years. Site conditions will be assessed at the end of each growing season during the 3-year monitoring period. NCDOT will provide an annual monitoring report by December 1 of each year documenting success, including: photo documentation, and problems, if any, encountered during the monitoring year timeframe. If at the end of the third year of monitoring, the success criteria are not met, a reevaluation of the site will be made by NCDOT and USACE to determine a course of action to meet the permit requirements for this permit. The Wilmington District, U.S. Army Corps of Engineers, Regulatory Division, must approve any deviation from this schedule.

An email sent by the U.S. Army Corps of Engineers, dated July 21, 2005 and included in the August 1, 2005 permit, requested that the monitoring report include the percentage of plants surviving. This report will reflect that request showing one vegetation plot set on this site.

2.2 Description of Species

The following tree species were planted in the Wetland Reforestation area:

Fraxinus pennsylvanica, Green Ash

Taxodium distichum, Baldcypress

Platanus occidentalis, Sycamore

Quercus lyrata, Overcup Oak

2.3 Results of Vegetation Monitoring

Plot #	Sycamore	Baldcypress	Green Ash	Overcup Oak	Total (2 year)	Total (at planting)	Density (Trees/Acre)
1	25	4	10	1	40	43	633
Average Density (Trees/Acre)							633

Site Notes: The restoration area is re-attaining wetland jurisdictional status and the planted species are surviving. Site had pockets of standing water at the time of monitoring. Other species noted: *Juncus* sp., black willow, red bud, fennel, cattail, smartweed, briars, red maple, *Pluchea* sp., sedge, pokeberry, ragweed, lespedeza, stinkweed, mimosa, and other various wetland species.

2.4 Conclusions

There was one vegetation monitoring plot established throughout the 0.75 acre site. The 2009 vegetation monitoring of the site revealed an average density of 633 trees per acre. This average is well above the minimum success criteria of 320 trees per acre for year one.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

The following report summarizes the monitoring activities that have occurred in the past year for the Roanoke River Overflow Mitigation Site. Monitoring activities in 2009 represent the second year of monitoring for the site. The site must demonstrate vegetation success for a minimum of three years or until the site is deemed successful.

There was one vegetation monitoring plot established throughout the 0.75 acre site. The 2009 vegetation monitoring of the site revealed an average density of 633 trees per acre. This average is well above the minimum success criteria of 320 trees per acre for year two.

NCDOT will continue vegetation monitoring at the Roanoke River Overflow Mitigation Site.

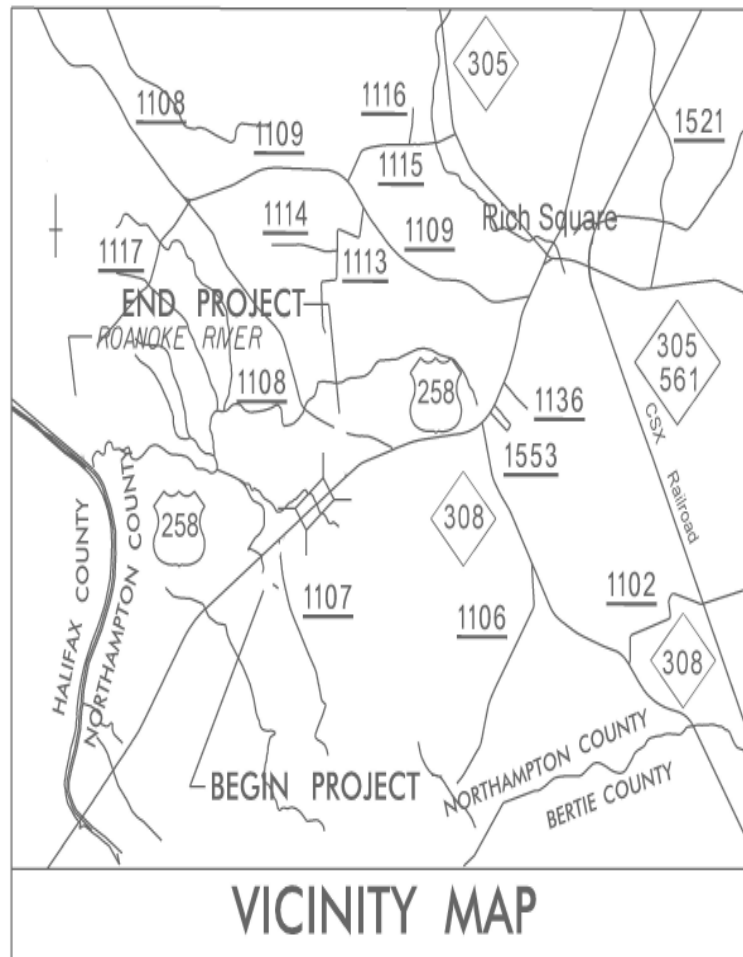


Figure 1 - Site Location Map

APPENDIX A

SITE PHOTOS

Roanoke River Overflow



Photo 1

July 2009

B-1303
Roanoke River Overflow
Northampton County

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